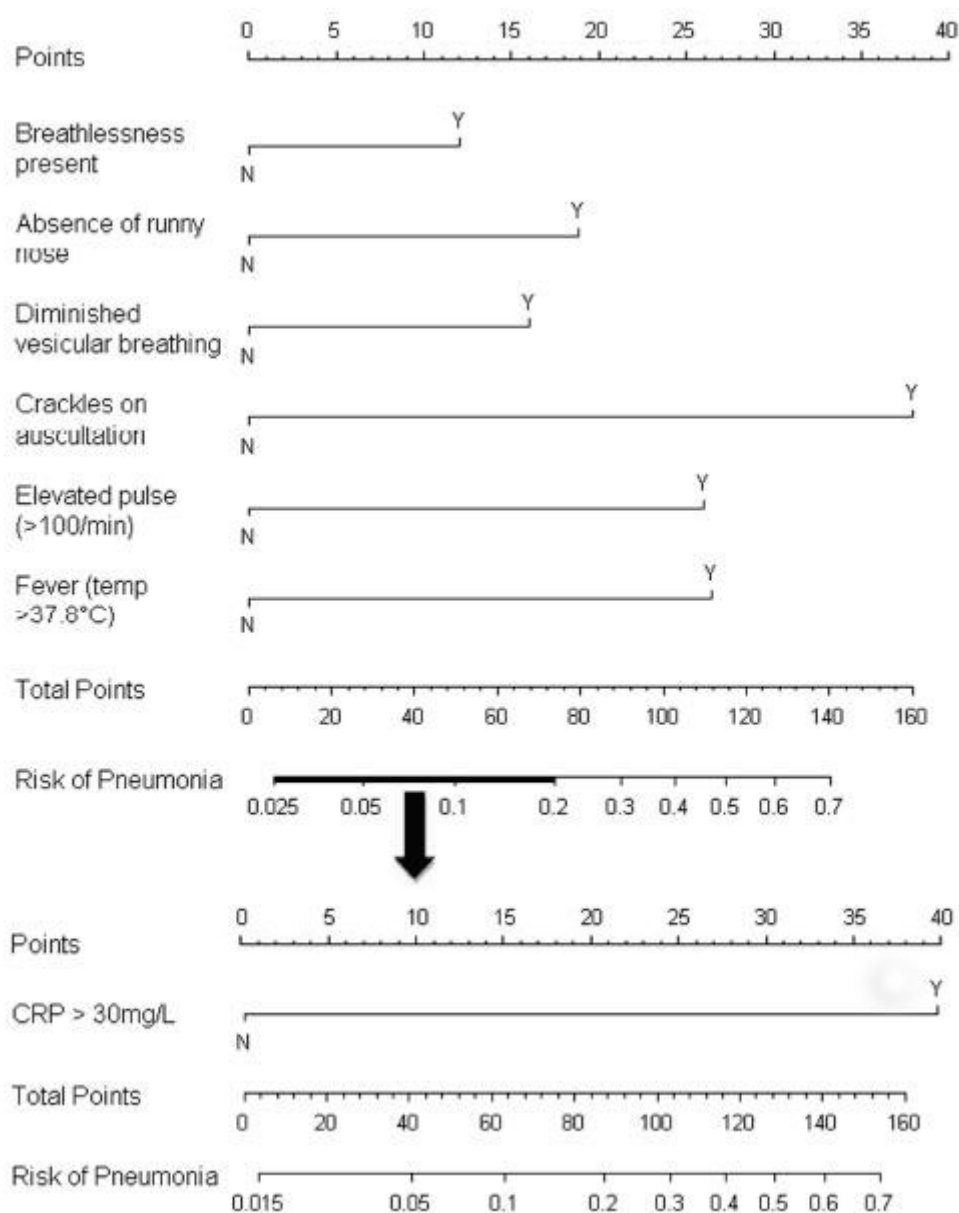


Appendix 5. Nomogram relating the diagnostic items of the final model to the probability of pneumonia. [posted as supplied by author]



Legend: Score system based on the symptoms and signs model to calculate the predicted risk of pneumonia for an individual primary care patient, also including the CRP test (optimal threshold 30 mg/L). Although the nomogram could be used for calculating the added value of CRP in every subject, the stepwise approach enhances targeted use of CRP. A bold area at the interim risk evaluation shows in which patients the additional value of CRP has shown to be highest (e.g. corresponding to the intermediate risk group (2.5-20%) based on symptoms and

signs alone, table 3). All diagnostic items from the model have to be scored. The points are summed up into a score. The corresponding risk of pneumonia can be read from the bottom line. To illustrate its use: a patient, aged 56, consults the GP with a cough. There is no runny nose (19 points), and no breathlessness (0 points). On examination there are both diminished breath sounds (16 points) and crackles (38 points) on auscultation, and fever (27 points). The total score is 100, which relates to a predicted risk of pneumonia of almost 40%. This is outside the intermediate risk range of 2.5-20% (0.025-0.20, or bold area on the risk axis), which makes further CRP testing unnecessary. In a second patient, aged 46, who presents with cough, only breathlessness (12 points) and an elevated pulse (26 points) are present: a total score of 38, corresponding to a pneumonia risk of roughly 0.07 (7%). This is within the intermediate risk range of 0.02-0.20 (bold area on the risk axis), for whom a CRP test is advised. If CRP is more than 30 mg/L (40 points) the new score is $38+40=78$ points, relating to a predicted risk of pneumonia of 15%, compared to a CRP below 30 mg/L (0 points) with a total score that remains 38 points, relating to a predicted risk of pneumonia that is below 5% (note the baseline risk of pneumonia in LRTI patients is 5%).